

ABSTRACT OF THE DISCLOSURE

The present invention relates to methods and compositions for culturing embryonic stem (ES) cells. The methods relate to growing the cells in culture on a flexible solid porous matrix, suitably without conditioned media or fibroblast feeder cells and applying an effective amount of periodic strain to stretch the flexible matrix, such that the cells proliferate and exhibit reduced differentiation. These methods in part facilitate a reduction in cross-species contamination for ES cells used in medical applications.

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